

chicks were black in colour and clothed in coarse white sheaths of the developing feathers (Fig. 1). Their stomachs were grossly distended. When one of the chicks was removed from the nest it opened its beak, spread its wings and defecated a brown, foul-smelling fluid.

The second nest was located on February 6 in a dense stand of *Coelorachis* up to 2 m high growing adjacent to the track leading from the Amax basecamp to Surveyors Pool. The dominant vegetation here was an open forest formation of *Eucalyptus tectifica* (Grey Box), *Eucalyptus latifolia* and *E. confertiflora*, with an understorey of *Erythrophleum chlorostachys* (Iron Wood) and *Planchonia careya* (Billy-goat Plum). When disturbed by the noise of our vehicle one of the birds flew clumsily up from the ground into a nearby tree where the other parent was perched. They both remained in near proximity to the nest (unlike the bird from the previous nest) scrambling from branch to branch leaning down towards us and screeching loudly.

The nest was similarly constructed to the previous one with the addition of a platform-like area of trampled grass, covered with a layer of *Eucalyptus* leaves, immediately outside the nest entrance. The nest contained four chicks and one egg but no shell remnants. The chicks were covered in white feather sheaths, the youngest chick being about half the size of the eldest.

—K. F. KENNEALLY, Western Australian Herbarium; K. C. PIRKOPF, Nedlands and J. A. SMITH, Maylands.

## OBITUARY

### JOHN TROTT (1903-1978)

Our member John Callas Trott died at a convalescent hospital near his home at Como on August 20, 1978. He was born in York on February 19, 1903. On his mother's side he was descended from the Clarksons, early settlers in the State, some of whom came out in the ship *Tranby* in 1830. His father, W. H. Trott, arrived from England in 1889 and joined the Perth branch of the Western Australian Bank, afterwards going to the bank's branches at Geraldton and Cue. After education at the Guildford Grammar School John Trott went as a jackaroo on Mr Vernon Hamersley's property, "Haseley," in Toodyay. For a short time he farmed at Wongan



Mr John Trott, 1928

Hills before buying the farm at Corrigin where he remained until 1975. Here his chief interest was his Bungaree sheep stud.

Mr Trott married Marina, younger daughter of Charles Harris ("Diorite"), the well-known prospector and mining man whose exploits were narrated in Malcolm Uren's book, *Glint of Gold* (Melbourne, 1948). They had two sons, Clive Trott, a farmer, and Peter Trott, a journalist.

In the Corrigin district he held executive positions in various organisations, including the Corrigin Agricultural Society, and was prominent in conservation activities, being appointed an honorary warden of fauna, and made an honorary life member of the Tree Society. Another interest was in divining for water, and he had some success in dry years on behalf of local farmers.

However, it was in natural history circles that he attained enduring fame as the discoverer of the famous Underground Orchid, *Rhizanthella gardneri*. This happened in May 1928. The discovery was announced in the *West Australian* newspaper of May 30 as follows: "What is regarded as a unique Australian orchid, constituting a botanical discovery of great moment, was found last week by a Corrigin farmer, Mr John Trott, whilst cultivating some virgin land. He sent the curious specimen, which resembled in appearance a white cactus flower, to the Department of Agriculture where it was immediately forwarded to Dr. R. S. Rogers, of Adelaide, who is the Australian authority on orchids. This week Dr. Rogers telegraphed back intimating that it was undoubtedly a unique discovery, the plant belonging to either a Malayan genus or one entirely new to science. Yesterday a further message was received from him stating that the plant represented a new genus 'as remarkable as the platypus'." In next day's issue was published a drawing of the plant by Mr C. A. Gardner, then assistant botanist at the Department of Agriculture, and made at the behest of Mrs E. H. Pelloc. Mr Gardner immediately visited Corrigin and in the *West Australian* of June 12 he described his experiences. He brought back at least four more plants, saying that "the plant is apparently extremely rare and two days' searching, aided by Mr Trott, only revealed two colonies."

It was described by Dr. Rogers as *Rhizanthella gardneri*, as a new genus and species, in the *Journal of the Royal Society of Western Australia*, 1928, 15: pp. 1-7.

Mr Gardner exhibited a specimen of the orchid at the monthly meeting of the Royal Society on June 12. This had come from Shackleton, about 28 miles north of Corrigin. A further extension of range, this time from Goomalling, was reported in the *West Australian* of June 29 by Mr L. Glauert, Curator of the W.A. Museum, to whom the specimen had been sent. Mr Glauert suggested the orchid was really widespread and must have frequently been met with by country residents but "because of ignorance of its true nature its existence had hitherto remained unrecorded." He appealed to readers that "if anyone comes across anything of this nature which he or she does not understand, it be sent to the Museum, when further information will be gladly given. That is one purpose of the institution." This advice was resented by Mr Gardner. That evening he had been billed to exhibit specimens and drawings of the new orchid at the monthly meeting of the W.A. Naturalists' Club. However, as one member recorded the proceedings: "There was something in the nature of a scene when Mr Gardner declined to say anything about the new orchid and asked that the 'Curator of the Museum' do so in the light of his remarks in the paper this morning asking that all such specimens be sent to that institution. However Mr Glauert rose to the occasion and saved the situation from developing any further." This may have been the same incident recounted by Mrs Rica Erickson in her *History of the W.A. Naturalists' Club* (1974, p. 8).

There was more heartburning over the discovery of the new orchid. Mrs Erickson in her history of the club relates that there were rumours that such a plant existed before Mr Trott brought it to the notice of knowledgeable authorities. Perth's well-known amateur botanist of those



days, and orchid specialist, the pharmacist O. H. Sargent, a former president of this Club, had inklings of the existence of such a plant. He had never seen it himself but others had told him of it. He had asked people in the Wheatbelt to contact him if ever one was found. Mrs Erickson stated: "He always lamented the fact that he was away on holidays at the time and the honour of its discovery went to Gardner." His original, quite natural, chagrin developed over the years into a brooding obsession. Mrs Erickson later amplified her discussion of the Sargent case, when as an old man he visited her in Bolgart: "He unburdened himself one night . . . He was quite lucid in his faculties, although grown so deaf he could not hear what I had to say and therefore my questions were useless. All I could do was to listen to a very bitter, rather jealous man who still resented the chance he had lost to be famous as the botanist who received and named that orchid. As he said—he knew of the plant, guessed its importance, implored the finder to contact him immediately if another was found. All would have been well but Sargent went on a holiday—'incognito' (his own word) to avoid the annoyance of having people solicit his professional services as a chemist. Because of this 'incognito' holiday he could not be contacted, so the specimens were sent to someone else. He reverted to this story several times during the evening." \*It is impossible to know whether John Trott was ever aware of Sargent's prior interest in the orchid. Mrs Trott had not married John at that time and when she was informed of the circumstances recently she said: "Had there been a promise about it, knowing Jack I am sure he would have made every effort to locate Mr Sargent. He has been in touch with members of the Department of Agriculture for many years, sending them specimens to identify. They in turn have conducted experiments on the farm so my guess would be that he felt they were the right people to ask about it." Mr Sargent never bore any ill-will to Mr Trott over the matter. In fact John would frequently call and see Mr Sargent in his shop at York when passing through to Perth. Mrs Trott recalls that the orchid found in 1940 was put into a nutrient jelly which Sargent had supplied for a specimen to be despatched to him as soon as another one was found. However, it was damaged by fungus before it reached York.

That country people had turned up the orchid long before the 1928 discovery, as Mr Glaucrt had surmised, was indicated by a letter published in the Melbourne *Herald* of December 5, 1970 by Mr Wilkie J. Thomson, then resident in Blackburn, Victoria. He said that his brother, Harold E. Thomson, when farming in newly surveyed country "160 miles north of Perth" in March 1914 (or 1912, the letter was ambiguous on this point) ploughed up a strange brownish-like plant which was placed in a box and sent to Perth "to a botanist. But it took days to reach Perth in that time of train travel so it was no surprise to us that it was reported to be 'some kind of fungus'". In 1916 he himself ploughed up some more in the same place. When Mr W. J. Thomson later saw a drawing of the Underground Orchid he recognized it as the same as their find. Mr Alex George, of the Western Australian Herbarium, followed up the letter and ascertained that the farm was in the Wubin district.

At the meeting of the Royal Society on December 11, 1928, Mr H. A. Pittman, assistant plant pathologist at the Department of Agriculture, presented a notable paper on the nutrition of the Underground Orchid. This was published in the same volume of the *Journal of the Society* as Dr Rogers' paper (on pp. 71-79) and discussion on it fully reported in the *West Australian* of December 13. Mr Pittman said that its nutrition "represented the extreme development of a mode characteristic of the orchids generally." *Rhizanthella* had no chlorophyll and no rooting system but a special hair structure had been evolved to ensure the entry of a fungus "on which the orchid had to be considered as parasitic." Mr W. E. Shelton, biology master at the Perth Modern School, pointed out that as the orchid could not build up any food compounds itself "the question arose why did

\* An obituary of O. H. Sargent by Rica Erickson was published in the *W.A. Naturalist*, 4 (2), 1953: 41-45.

the fungus attack it all, because in its early stages it would have nothing to offer?" Mr Pittman said the point raised was a fascinating one whose solution depended on knowledge of the early history of the plant.

The year 1928 must have been a vintage year for the Underground Orchid. According to the *West Australian* of May 11, 1978, the plant was seen only four times subsequently, "in each case by a farmer clearing new land. It was last sighted in 1959 near Babakin." By a curious coincidence the finder, Mr C. W. Bee, was a cousin of Mr John Trott. It was found 7 miles west of Babakin on May 23, 1959.

Mr Trott, naturally enough, never lost interest in his discovery. He named his farm "Rhizanthella" after the orchid. In later years he summarised his field knowledge of the species: "All thirty-nine specimens were found in association with *Melaleuca uncinata*. This *Melaleuca* can stand waterlogging periods better than most plants. The soil was sandy-surfaced but had a clay subsoil, some three to six inches. The area had previously carried a fierce fire; whether this stimulates the orchid or not I do not know. I am certain early and heavy summer rain is essential. The general pattern is a rhizome from which several bracts and flowers emerge at different times. From the tuber a stalk runs out some inches, usually horizontal; the bracts and flowers form on the end of it. The largest of the thirty-nine found in 1928 was one inch in the cupola and three inches from the base of the cupola to the tips of the bracts. Very careful observation was made on most of the specimens to see what was the normal position of the orchid. They grow in colonies. The rhizomes look permanent but are not. Every endeavour to propagate the orchid has failed. From specimens I found embedded in clods of earth and other evidence I do not think more than one-sixteenth of an inch of the tip of the bract shows above the surface. That it must reach this position was evidenced by a rabbit scratching spoil from a warren over a colony. The stem was ten inches long; usually they were three to four and not straight. The bracts were a faint purple when first turned up but exposure soon made them and the little flowers inside the cupola a deep purple. One specimen was found by my wife in 1940. Marking a growing colony proved futile."

Mr Trott visited the herbarium at the Royal Botanical Gardens, Kew, on a visit to England in 1971 and was warmly welcomed. On his occasional visits to Perth and attendance at meetings of the Naturalists' Club he was always a person of interest as the discoverer of a notable botanical find. After retiring to Como Mr and Mrs Trott came to meetings of the Retired and Leisured Group of the Club, which Mrs Trott still attends.

In May 1978 Mr Trott announced a reward of \$100 to the first person to find the orchid again. This has been awarded to Mr John McGuinness of Munglinup, between Esperance and Ravensthorpe. He found the orchid on May 26, 1979.

Dr. P. R. Wycherley, Director of Kings Park and Botanic Garden, has provided the following note on pending research on the orchid:

"The World Wildlife Fund is seeking financial support to sponsor a project proposed by the Botany Department, University of Western Australia and Kings Park and Botanic Garden. A botanist would be engaged to investigate the distribution of *Rhizanthella gardneri* and the status of existing Reserves and of areas which might be recommended as Reserves for the Conservation of Flora and Fauna, especially of the Subterranean Orchid. There are very few conservation reserves in the Wheatbelt corresponding to the Avon Botanical District or System 4 and it is urgent that areas with such potential are identified and protected. The recent discovery of *R. gardneri* at Munglinup in the Eyre Botanical District or System 3 in the Environmental Protection Authority's classification, confirms that *R. gardneri* is not extinct and the project is not too late. It extends the range of country to search for the plant and suitable areas for reservation. Once again *R. gardneri* has been found in the course of land clearing, which emphasises the urgency of conservation in agricultural areas. It is hoped to launch the project functionally in autumn 1980 so that there will be full winter growing and spring seasons for field work."

—D.L.S.